



# MATERIAL SAFETY DATA SHEET

## Energy Shield®

**MANUFACTURER :** Atlas Roofing Corporation  
**ADDRESS :** 2000 River Edge Parkway  
Suite 800  
Atlanta GA 30328

**PHONE :** Call one of the following numbers for the location closest to you.  
Hours 8:00 AM to 5:00 PM (respective time zone)

Camp Hill, Pennsylvania	800-688-1476
East Moline, Illinois	800-677-1476
LaGrange, Georgia	800-955-1476
Northglenn, Colorado	800-288-1476
Phoenix, Arizona	800-477-1476
Diboll, Texas	800-766-1476
Etobicoke, Ontario, Canada	888-647-1476

**DATE OF PREPARATION :** January 1, 2005

**PREPARED BY :** Environment and Health Officer

**PRODUCT NAME :** Energy Shield® Insulation

### SECTION 1 - COMPONENT DATA

#### HAZARDOUS INGREDIENTS

COMMON NAME	CHEMICAL NAME	PERCENT (approx.)	C.A.S. NUMBER
Polyisocyanurate Foam	Same	98	None
Pentane	Same	2	109-66-0

### SECTION 2 - PHYSICAL DATA

#### PROPERTY

Boiling Point (° F) : NA\*  
Melting Point : NA  
Vapor Pressure (mmHg @ 20° C) : NA  
:  
Percent Volatile By Volume : NA  
pH : NA  
Vapor Density (Air = 1) : NA

#### PROPERTY

Specific Gravity (H<sub>2</sub>O=1) : ND\*\*  
Solubility In Water : Insoluble  
Evaporative Rate (Ethyl Ether = 1) : NA  
:  
Appearance And Odor : White or cream colored solid with a foil facing, and with no odor

\*NA = Not Applicable

\*\*ND = Not Determined

**SECTION 3 - FIRE & EXPLOSION HAZARD DATA**

Flash Point (° F)	: NA	Method Used	: NA
Flammability Limits	: NA		
LEL : NA	UEL : NA		
Auto-Ignition Temperature (° F)	: NA		
Extinguishing Media	: CO <sub>2</sub> , Dry Chemical, Water Spray		
Special Fire Fighting Instructions	: Self contained breathing apparatus		
Unusual Fire And Explosion Hazards :	This product will burn and should not be left exposed. Under certain fire conditions, combustible gases can be generated creating rapidly spreading, high intensity flames and dense, black smoke.		

**SECTION 4 - REACTIVITY DATA**

Stability (Conditions to Avoid)	: Stable, avoid sources of ignition.
Incompatibility (Materials to Avoid)	: Acetone, methyl ethyl ketone, tetrahydrofuran, chlorine, chloroform, hydrogen peroxide, ethylene dichloride, dimethyl sulfoxide, and dimethyl formamide.
Hazardous Decomposition Products	: Primarily CO, CO <sub>2</sub> . Some HCN possible under certain conditions.
Hazardous Polymerization	: Will not occur.

**SECTION 5 - HEALTH HAZARD DATA**

Primary Route(s) of Entry	: Inhalation
Health Hazards (Acute and Chronic)	:

**INHALATION**

Acute	: Dust may cause respiratory tract irritation.
Chronic	: There is no evidence that polyisocyanurate foam dust causes disease in humans.

**SKIN CONTACT**

Acute	: Dust may cause mechanical irritation.
Chronic	: None known.

**EYE CONTACT**

Acute	: Dust will cause mechanical irritation.
Chronic	: None known.

**Signs and Symptoms of Exposure**

Mechanical irritation of the eyes, skin and respiratory tract.

**Medical Conditions Generally Aggravated By Exposure**

Any condition generally aggravated by mechanical irritants in the air or on the skin.

**Exposure Limits**

Hazardous Ingredients	OSHA PEL (mg/M <sup>3</sup> )	ACGIH TLV (mg/M <sup>3</sup> )	Other Recommended (Source)
Polyisocyanurate Foam (as nuisance dust)	15 mg/M <sup>3</sup>	10 mg/M <sup>3</sup>	None
Pentane	1000 ppm TWA	600 ppm TWA	1500 ppm IDLH (NIOSH)

**Carcinogenicity**

Hazardous Ingredients	NTP Listed	IARC Listed	OSHA Regulated
Polyisocyanurate Foam	No	No	No
Pentane	No	No	No

**SECTION 6 - EMERGENCY AND FIRST-AID PROCEDURES**

- Inhalation : None required.
- Skin : Wash with soap and cool running water.
- Eyes : Flush with running water for at least 15 minutes.

**SECTION 7 - SPECIAL HANDLING AND STORAGE INFORMATION**

- Installation Procedure : Cutting of product should be done with a serrated type knife or saw (i.e. gypsum wallboard or keyhole). The use of rotary powered saws is not recommended, as the original continuous filament fibers in the facings are of non-respirable size and the use of powered saws may create smaller fibers and cause them to become airborne.
- Ventilation : Ambient. Store in a dry, well ventilated area. Assure storage containers or areas and shipping containers are adequately ventilated.
- Respiratory Protection : If irritation occurs or TLV is exceeded, use a respirator such as 3M Model 8271, Model 8210, or equivalent for protection against nuisance dusts.
- Protective Clothing : If excessive dust is generated during cutting operations, wear long sleeved shirt, loose fitting clothing, long pants and gloves, to reduce irritation.
- Eye Protection : Goggles or safety glasses with side shields are recommended.

**Work / Hygienic Practices :** Exposed skin areas should be washed with soap and cool water after working with product. Clothing should be laundered separately from other clothes. Handle product using good industrial hygiene and safety practices. Avoid unnecessary dust exposures when cutting or abrading by using adequate local or general ventilation.

**SECTION 8 - SPILL, LEAK & DISPOSAL PROCEDURES**

**Action To Take For Spills (Use Appropriate Safety Equipment) :**

NA

**Waste Disposal Method :**

Dispose in accordance with federal, state and local regulations.  
The primary method of disposal is in a municipal or industrial landfill.

**EPA Hazardous Waste Number :** NA

This material is not regulated under the "RCRA" hazardous waste regulations.

**SECTION 9 - SPECIAL PRECAUTIONS / ADDITIONAL INFORMATION**

**Precautions To Be Taken In Handling And Storage :** None

**Department of Transportation Information :**

**Hazardous Material Proper Shipping Name :** Not Regulated by D.O.T.  
**Hazard Class :** NA  
**UN Identification Number :** None

**Additional Information :** None

**Prepared by :** Larry Overstreet (KH)  
Environment and Health Officer  
Atlas Roofing Corporation